Attorney's Docket No.: 07300-025002 / TSRI 414.0 Con.1/SCR 1994P

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Burton et al.

Art Unit : Unknown

Serial No.: unassigned

Examiner: Unknown

Filed

: February 15, 2002

Title

: LIGAND CAPTURE-DIRECTED SELECTION OF ANTIBODY

Commissioner for Patents Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

In the specification:

Include the following paragraph at page 1, line 1:

This application is a divisional of U.S. application serial no. 08/972,564, filed November 18, 1997, which is a continuation of U.S. application serial no. 08/316,914, filed October 3, 1994, the disclosure of which is considered part of (and is incorporated by reference in) the disclosure of this application.--

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Gabe Lewis Typed or Printed Name of Person Signing Certificate Applicant: Burton et al. Attorney's Docket No.: 07300-025002 / TSRI 414.0

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In the claims:

Cancel claims 1-14.

Amend claims 15 and 16 as follows:

15. (Amended) A antibody that binds to a previously unknown epitope on a preselected antigen, said antibody obtained by the method comprising:

a) forming an immunocomplex by contacting the preselected antigen with a first antibody bound to a solid support, wherein the first antibody specifically binds to a preselected epitope present on the preselected antigen;

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- b) contacting the immunocomplex of a) with a combinatorial library of antibodies under conditions that allow binding of the second antibody to the previously unknown epitope, wherein a second antibody is obtained from screening the combinatorial library;
- c) removing the second antibody of b) from the previously unknown epitope; and
- d) obtaining the second antibody.
- 16. (Amended) The antibody of claim 15, wherein the antibody has the specificity of an antibody produced by E. coli ATCC 69522.

The following claims have been added:

- 17. The antibody of claim 15, wherein the first antibody is an Fb or an Fab fragment.
- 18. The antibody of claim 15, wherein the antigen is selected from the group consisting of a bacterial, a viral, a parasitic, a fungal, a tumor and a self-antigen.
- 19. The antibody of claim 18, wherein the viral antigen is selected from the group of viruses consisting of a hepatitis B virus (HBV), a human immunodeficiency virus (HIV), an influenza A virus, an Epstein Barr virus (EBV), a herpes simplex virus (HSV), a respiratory syncytial virus (RSV), a human cytomegalovirus (HCMV), a varicella zoster virus (VZV), and a measles virus.

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- 20. The antibody of claim 19, wherein the viral antigen is a HSV glycoprotein D.
- The antibody of claim 15, wherein the preselected epitope is a non-neutralizing epitope. 21.
- 22. The antibody of claim 15, wherein the previously unknown epitope is a neutralizing epitope.
- 23. The antibody of claim 17, further comprising sequencing a nucleic acid encoding an amino acid sequence of the second antibody.

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REMARKS

Prior to examination, Applicant respectfully requests entry of the present preliminary amendment. Claims 1-14 have been canceled without prejudice. Claims 15 and 16 have been amended. Claims 17-23 have been added. No new matter has been added. Upon entry of the preliminary amendment, claims 15-23 are pending and under examination. Attached is a marked-up version of the changes being made by the current amendment.

No fee is believed to be due in connection with the filing of this paper; however, please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 2/19/02

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Version with markings to show changes made

In the specification:

Include the following paragraph at page 1, line 1:

--This application is a divisional of U.S. application serial no. 08/316,914, filed October 3, 1994, the disclosure of which is considered part of (and is incorporated by reference in) the disclosure of this application.--

In the claims:

Claims 1-14 have been cancelled.

Claims 15 and 16 have been amended as follows:

- 15. A[n] antibody [molecule identified] that binds to a previously unknown epitope on a preselected antigen, said antibody obtained by the method [of claim 1] comprising:
 - a) forming an immunocomplex by contacting the preselected antigen with a first antibody bound to a solid support, wherein the first antibody specifically binds to a preselected epitope present on the preselected antigen;
 - b) contacting the immunocomplex of a) with a combinatorial library of antibodies under conditions that allow binding of the second antibody to the previously unknown epitope, wherein a second antibody is obtained from screening the combinatorial library;
 - c) removing the second antibody of b) from the previously unknown epitope; and
 - d) obtaining the second antibody.
- 16. (Amended) The antibody [molecule] of claim 15, wherein the antibody [molecule] has the specificity of an antibody [molecule] produced by E. coli ATCC 69522.

The following claims have been added:

17. The antibody of claim 15, wherein the first antibody is an Fb or an Fab fragment.

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The antibody of claim 15, wherein the antigen is selected from the group consisting of a 18. bacterial, a viral, a parasitic, a fungal, a tumor and a self-antigen.

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- The antibody of claim 18, wherein the viral antigen is selected from the group of viruses 19. consisting of a hepatitis B virus (HBV), a human immunodeficiency virus (HIV), an influenza A virus, an Epstein Barr virus (EBV), a herpes simplex virus (HSV), a respiratory syncytial virus (RSV), a human cytomegalovirus (HCMV), a varicella zoster virus (VZV), and a measles virus.
- 20. 21. 22. 22. The antibody of claim 19, wherein the viral antigen is a HSV glycoprotein D.
 - The antibody of claim 15, wherein the preselected epitope is a non-neutralizing epitope.
 - The antibody of claim 15, wherein the previously unknown epitope is a neutralizing epitope.
 - The antibody of claim 17, further comprising sequencing a nucleic acid encoding an amino acid sequence of the second antibody.